

## THE OBSTETRIC FUTURE OF THE CESAREANIZED PATIENT

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(From the Margaret Hague Maternity Hospital)

EVERY woman who has been delivered by cesarean section deserves our best efforts in answering her questions concerning her obstetric future. The first question is usually: "Can I have more children?" The answer is usually an unqualified, "Yes." We know that the woman who has undergone a cesarean section generally has fewer children than her sister who delivers her babies vaginally, but in the absence of accurate statistics due to other than medical reasons, we see no real evidence that cesarean section interferes with fertility. The operation also has little direct effect upon the time of subsequent conception, but, here also, the associated physical factors involved in caring for her children are more important than wound healing in estimating that subsequent children probably should be at least two years apart.

Second: "Will I have another cesarean section?" I believe that the answer should be qualified. Every woman should be advised that she should be prepared to undergo another cesarean section if she again becomes pregnant, but there are some that may be delivered vaginally, and I believe that in certain circumstances, particularly in instances of a nonrecurring indication, they should be allowed to demonstrate such capacity. They should, however, never be told that they will not require cesarean section.

There is controversy in some areas concerning such advice. "Once a cesarean section, always a cesarean section" is a policy in many excellent hospitals. Other institutions have allowed selected individuals to undergo labor and have been satisfied that the over-all general welfare of their patients is thereby enhanced.

Table I indicates the recent experience of several clinics that adhere to the latter policy.

TABLE I. EXPERIENCE IN HOSPITALS PERMITTING VAGINAL DELIVERY AFTER CESAREAN SECTION

HOSPITAL	YEAR	TOTAL CASES	VAGINAL DELIVERY
Jefferson Medical College Hospital	1936	221	16.0%
Margaret Hague	1950	500	35.8%
Lewis Memorial	1951	448	32.6%
New York Lying-In	1951	445	38.7%

Why is there a difference of opinion? Those who routinely reoperate upon women who have had prior cesarean section believe that the operation is always safer than the danger of inviting rupture of the uterus. They also believe that it is impossible to predict the uterus that may rupture while undergoing the strain of increasing growth with a subsequent pregnancy.

Such opinions are cogent, and must be answered if one undertakes to accept such risk. Concerning the possibility of rupture of the uterus:

*First:* The increasing safety and development of technique which may be used to argue the safety of repeating the operation, may also be stated as an argument indicating the decreasing risk of rupture if the original operation is properly performed.

*Second:* The incidence of catastrophic rupture of the uterus is low, and, although its danger is admitted, the operation of cesarean section itself, in spite of its low mortality, does cause death to a degree that often more than not counterbalances the risk of rupture. The most recent survey of a large group of cesarean section deaths<sup>2</sup> indicates that there is always a risk from infection, hemorrhage, and anesthesia, even in elective operations without other complicating diseases.

*Third:* Repeat cesarean section, even if performed electively a few days prior to the expected date of confinement, does not prevent the occurrence of rupture of the scar, for generally one-third to one-half of such ruptures occur prior to labor and prior to the usual date of elective termination. Additionally, elective cesarean section occasionally handicaps the infant by prematurity in the event of a miscalculation of the duration of pregnancy.

*Fourth:* Recent experience does not indicate that rupture of the scar of a previous incision in the uterus is always as catastrophic as earlier experience would indicate, and usually is not the calamitous emergency of other types of rupture of the uterus, particularly if the rupture is through a low-segment incision.

*Fifth:* The fecundity of women with a previous cesarean section scar who later are delivered vaginally is higher than that of those who must be reoperated upon.

*Sixth:* Women who can and are allowed to deliver vaginally do so with less morbidity than those who are reoperated upon.

*Seventh and finally:* The increase in the use of cesarean section to solve problems other than disproportion is causing an increase in the number of multiparous women who are subjected to a primary cesarean section. Unless there is evidence that there was difficulty in their previous vaginal deliveries, such women may be allowed vaginal delivery after a cesarean section under proper safeguards. Thirty-five and eight-tenths per cent of the women who have had previous cesarean sections are delivered vaginally at the Margaret Hague Maternity Hospital but, of these, about 25 per cent had successful vaginal deliveries prior to the initial cesarean section. Not all patients are subjected to a second "test of labor," nor are they allowed to remain in labor unless the prognosis for vaginal delivery is better than fair.

Concerning the diagnosis of impending rupture of the uterus, I agree that there is no method of accurate prediction.

Alternatively, most of the signs and symptoms commonly understood to evidence impending rupture are usually found to be equivocal and are probably related to the parietes rather than the scar of the uterus.

Finally: "How many babies can I have?"

If a pregnancy subsequent to the cesarean section is terminated by vaginal delivery, there is no physical limit. One woman in our experience had eleven babies vaginally after an initial cesarean section for eclampsia. However, the occurrence of a successful vaginal delivery after a cesarean section does not indicate that the possibility of rupture in subsequent pregnancies has been curtailed, and each pregnancy must be conducted under proper safeguards. These safeguards include competent continuous observation, careful evaluation of all unusual symptoms and signs, adequate blood immediately available, and facilities present that are adequate to allow the performance of any necessary procedure that may be required. It has been suggested that such safeguards are not universally available, but I am convinced that they are the only circumstances under which I would feel safe in the handling of any pregnancy. Rupture of the uterus certainly is not the only indication that may require sudden major intervention in a parturient.

If all her children must be delivered by cesarean section the number I believe is also unlimited providing the integrity of the uterus is maintained. The practice of sterilizing a woman after two or three cesarean sections is medically archaic. Not more than a generation or two ago cesarean section mortality was sufficiently high to provide argument for those who would not allow more than two or three such operations. With a 20 per cent mortality, not many operations were needed to consume the patient's life expectancy. In the present era of chemoantibiotic therapy, abundant blood, and relatively standardized safe techniques, such arguments are invalid. A woman's child-bearing life is too short for the present cesarean section mortality to decrease her life expectancy to any significant degree. The uterine scar, the formation of adhesions, the presence of uterine varicosities are as likely after one operation as after several. Some clinics sterilize after an arbitrary number of cesarean sections, but I feel that their position should be re-examined.

Table II<sup>3</sup> indicates that the fecundity of a mother who is delivered by cesarean section wanes rapidly. I feel that this is medically unnecessary today, and that if the uterus is so diseased at a cesarean section subsequent to the original operation that the prospect of further safe childbearing is compromised, it should be removed, serving no further useful purpose. If not grossly changed enough to warrant such a procedure there does not seem to be any good medical reason for not allowing the woman subsequent pregnancies, regardless of number.

TABLE II. WANING FECUNDITY OF PATIENTS DELIVERED BY CESAREAN SECTION EXCLUSIVELY

	NUMBER OF CESAREAN SECTIONS					
	2	3	4	5	6	7
Matthews (1939)	279	48	3			
Barrett (1939)	163	26	2			
Free (1945)	167	26	1			
McSweeney and Hassett (1948)	349	181	52	16	7	1
Schmitz and Gajewski (1951)	87	31	8	2		
Margaret Hague (1950)	269	53	10			

### Summary

A woman who has been subjected to a cesarean section may look forward to subsequent pregnancies with confidence that she may increase her family without undue risk to herself regardless of the method of her delivery in such subsequent pregnancies. Under certain circumstances she may have her subsequent children delivered vaginally, but even if by cesarean section the safety of the operation is sufficient to give her the opportunity of having children to her physiological capacity.

### References

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